

VT-440RUTP Video Receiver

VT-440R receives balanced signal to converts it into unbalanced signal and raises the received signal with perfect receiving effect, which can be applied for the occasions such as video monitoring and video meeting and can transmit four channels of video image simultaneously via a 8-core Cat-5 twisted pair wire. It can simplify the wiring project and save wire use quantity.

Features:

- Adopt differential signal transmission with excellent anti-jamming ability
- Save project wire expenses, each a pair of twisted pair wire transmits one channel of video signal and one common Cat-5 unshielded twisted pair wire can simultaneously transmit four channels of video signal
- The farthest transmission distance will be 1500m if it is used with passive transceiver (VT-401A, VT-401C and VT-402) and The farthest transmission distance can reach 2400m if it is used with active transmitter (VT-410T and VT-440T)
- Built-in transient suppression protection

Technical specifications:

- Frequency response: DC-8MHZ
- CMRR (Common Mode Rejection Ratio): 60DB
- Impedance: BNC terminal: 75Ω, Connection terminal: 100Ω
- Working temperature: -10℃-70℃
- Storage temperature: -30℃-70℃
- Applicable to NTSC, PAL, SECAM and CCIR systems
- External dimension: 204mm*103mm*49mm (excluding BNC)
- Power supply: DC12V

Type of the required wire:

Unshielded Cat-5 or above twisted pair wire (Please use standard Cat-5 or above twisted pair wire. The wire quality will directly affect the transmitted image effect and transmission distance.)


Characteristic impedance: 100Ω±20Ω

DC loop resistance: 18Ω/100m


Differential capacitance: 62pf/m (Maximum)

Connection method:

Clamp the modular plug for a Cat-5 unshielded twisted pair wire according to the connection order of TIA/EIA-568B (please refer to the following figure) and connect the clamped modular plugs

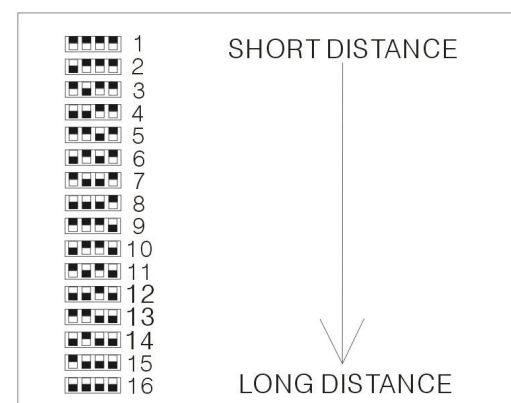
to the RJ45 socket or connect the two-color wires of a pair of Cat-5 unshielded twisted pair wire to the ‘+’ terminal of the green socket and connect the single-color wires to the ‘-’ terminal of the transmitter. If there is any joint in the circuit, please adopt welding method or special junction box to ensure perfect contact at the joint. Connect the BNC interface of the receiver to the monitor or other recording equipments. **Please be sure to connect the interface marked with ‘’ symbol to the ground wire of the lighting-proof system with the copper conductor with sectional area≥1.5 mm²!**

The clamping order of the modular plug is shown as follows:

R J 4 5		1 2 3 4 5 6 7 8	PIN	COLOR
			1	W - O
			2	W
			3	W - G
			4	B L
			5	W - B L
			6	G
			7	W - B R
			8	B R

Adjusting method:

Adjust “BRIGHTNESS” knob to adjust the image brightness, then adjust “SHARPNESS” dial switch to compensate the image sharpness and color. The compensation size in turn is 1 as minimum and 4 as maximum. Pressing dial switch shows the compensation of this position is turned on. Next or multiple switches can be pressed according to the requirements. The four dial switches can compose 16 compensation values (as shown in the following figure) to meet the requirements of different transmission distances.



Frequently Asked Questions

Why does my video look like a scrambled Cable TV signal?

This typically indicates reversed polarity.

Can shielded twisted pair be used?

Some customers have successfully used shielded wire up to a few hundred feet. However VITECH does not recommend it. Its high-frequency roll-off will severely degrade the distance performance.

Can Category 6 wire be used?

Yes. Unshielded Twisted Pair wire, Category 5 or better, can be used with VITECH

Can I transmit more than one video signal in a multi-pair wire bundle?

Yes. One of the benefits of using VITECH transceivers is interference rejection. VITECH video signals can reside in the same wire bundle as multiple video signals, ringing telephones, Ethernet, low voltage power, RS-422, RS-485, etc.

Application Diagram

